

Name \_\_\_\_\_

Exam ID: \_\_\_\_\_

MAT16C Written Assignment  
Due Monday, 4/16

### **Read, Reflect, and React (or Respond) Prompt #2**

Many mathematicians want to study and analyze the world around us. One way to do this is to quantify a phenomenon, using numbers and equations, and notice patterns about it. Towards this goal, differential equations were created and have been the study of mathematicians for centuries. These equations are used to describe things like population growth or chemical reactions. Today, I presented a differential equation example on shooting a basketball. I would like you to think of your own example, and:

1. Provide a differential equation that is connected to your life. Discuss how/why it is connected to your life. Make sure to include units to your differential equation. Solving the differential equation is optional.